IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS AUSTIN DIVISION

PILOT ENERGY SOLUTIONS, L.L.C.))
Plaintiff,)
v.) CIVIL ACTION NO. 1:16-cv-00687-SS
OXY USA INC.)
Defendant.))

Pilot's Opening Claim Construction Brief

Claims are construed from the standpoint of a person having ordinary skill in the relevant art. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed Cir. 2005) (en banc). The skill level here is an undergraduate degree in chemical engineering and at least five years of work experience in the field of process design.

Most of the contested claim terms, such as "stream," have plain meanings. For the most part, we have asked the Court to construe these terms in accord with those meanings. See *Phillips*, 415 F.3d at 1312-13. A few claim terms designate a stream by a single ingredient, e.g., "carbon dioxiderich stream." Because a stream may contain multiple ingredients, the name of one such ingredient may not always be enough to ascertain that claim's scope. In such instances, we have looked to the patent specification to discern how much, or how little, of that ingredient must be present, and how to measure it. See *Teleflex, Inc. v. Ficosa North America Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002) ("specification may assist in resolving ambiguity where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone").

A. "Stream."

The claims of the Pilot patent refer to several streams. The plain meaning of "stream" is simply something that can flow. A "stream" may designate material, such as a liquid, a vapor, or some combination of liquid and vapor. See Pilot patent, col. 4, l. 56-58. Or a "stream" may designate energy. See Pilot patent, col. 8, l. 14 ("energy streams 300, 302, 304, 306, 308, 310, 312, 314").

According to Oxy, "stream" means "[t]he entire flow of materials within a pipeline." But the independent claims of Pilot's patent say nothing about "pipelines." Instead, these claims indicate that "streams" will exist in components **other than** pipelines. For example, claim 1 speaks of "separating a reflux stream from the carbon dioxide-lean stream in a reflux condenser." A reflux condenser is not a pipeline, yet two "streams" exist in it. Similarly, claim 33 speaks of "treating the hydrocarbon feed stream in a distillation column to produce a carbon dioxide-lean first column stream and a carbon dioxide-rich second column stream." A distillation column is not a pipeline, yet three "streams" exist in it. The "within a pipeline" part of Oxy's definition is unsound, because the claims themselves contemplate that "streams" will exist within non-pipeline equipment, such as reflux condensers and distillation columns.

The "entire flow of materials" part of Oxy's definition also poses problems, because it would require two different streams to be designated as a single stream. Using claim 1 as an example, "the entire flow of materials" within the reflux condenser includes two streams: a reflux stream and a carbon dioxide-lean stream. Yet, under Oxy's definition, there is but a single "stream" within that condenser: a result flatly inconsistent with the claim's two-stream requirement. The "entire flow of materials" part of Oxy's definition is unsound, because the claims themselves contemplate that the entire flow of materials within a component may include two or more streams, not just one.

A "stream" is something that can flow. Oxy's narrower definition is inconsistent with the term's plain meaning, as well as how that term is used in the claims. See *Digital Biometrics, Inc. v. Identix, Inc.*, 149 F.3d 1335, 1344 (Fed. Cir. 1998) ("The actual words of the claim are the controlling focus").

B. "Separating."

Two steps in claim 1 require "separating" one or more streams from another. "Separating" means "dividing." The Pilot patent gives several examples of equipment that can function as a "separator." One is a phase separator, which "separates an inlet stream into a substantially vapor stream and a substantially liquid stream." Pilot patent, col. 7, 1. 23-24. The patent also indicates that condensers, such as reflux condensers, can function as separators. See Pilot patent, col. 7, 1. 31-34.

Oxy defines "separating" as "[s]plitting a stream into two different streams." Such a definition is too narrow, because a separation can result in more than two streams.

C. "Light" and "Heavy" Hydrocarbons.

The parties seem to agree that hydrocarbons are compounds formed from carbon and hydrogen. Hydrocarbons may be classified as "heavy" or "light" based on the number of carbon atoms per molecule. Both "heavy" and "light" are terms used in the claims with reference to hydrocarbons, *e.g.*, "light hydrocarbon stream."

The words "light" and "heavy" are terms of degree that do not, in themselves, specify a number or range of carbon atoms. The specification may be consulted to clarify such an issue. See *Datamize*, *LLC v. Plumtree Software*, *Inc.*, 417 F.3d 1342, 1351 (Fed. Cir. 2005) (specification may provide standard for term of degree used in claim). Here, the specification describes hydrocarbons with three carbon atoms or more as "heavy" hydrocarbons. See Pilot patent, col. 5, 1. 21-22. "Light"

hydrocarbons are those with fewer than three carbon atoms: methane and ethane.

Carbon dioxide, which contains no hydrogen, is not a hydrocarbon.

D. "Hydrocarbon Feed Stream".

1. Pilot's Definition.

Claim 1 defines a method of treating a hydrocarbon feed stream, while claim 33 defines a process of treating a hydrocarbon feed stream. The plain meaning of "hydrocarbon feed stream" is a stream containing hydrocarbons that is fed into something. Is there any reason to depart from this plain meaning?

The only potential ambiguity in the term rests in the stream's ingredients, only one of which is named. Can a "hydrocarbon feed stream" contain anything **other than** hydrocarbons? If yes, must hydrocarbons be the predominant ingredient of the stream? The first question is answered by the claim language itself: both claims state that the hydrocarbon feed stream contains a non-hydrocarbon: carbon dioxide. As to the second question, whether hydrocarbons must be the predominant ingredient, the claim language offers no definitive answer. Resort to the patent specification is appropriate to resolve this issue. See *Teleflex, Inc. v. Ficosa North America Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002).

The specification designates stream 200, shown in both Figures 1 and 2, as a "hydrocarbon feed stream." In Table 2, stream 200 is described as containing 36.42% hydrocarbons (methane, ethane, propane, butane, hexane and octane) and 63.08% carbon dioxide. See Pilot patent, col. 10, l. 9-24 and col. 11, l. 1-5. A different example describes stream 224 as having the same relative content of hydrocarbons and carbon dioxide. See Pilot patent, table 5, col. 13. These examples make clear that a "hydrocarbon feed stream" need not have hydrocarbons as its predominant ingredient. Indeed, the

content of non-hydrocarbons, such as carbon dioxide, may exceed that of hydrocarbons in the stream.

The patent specification reveals no need for departure from the term's plain meaning. A "hydrocarbon feed stream" is a stream containing hydrocarbons that is fed into something.

2. Oxy's Definition.

Oxy essentially takes Pilot's definition and tags on a part of the life history of a particular stream described in the specification. According to Oxy, a hydrocarbon feed stream is "[a] hydrocarbon-containing stream **prior to separation into the light hydrocarbon stream and the heavy hydrocarbon stream**." This "prior to separation" requirement is unsound, because it unnecessarily imports a limitation from the specification into the claim.

We have used the specification to clarify the meaning of the word "hydrocarbon," as used to designate a stream: that word means "any hydrocarbon," rather than "exclusively hydrocarbon" or "predominantly hydrocarbon." Oxy, in contrast, is using the specification to provide the life history of a particular stream, which it then imports into its definition ("prior to separation ..."). But such life history is not needed to define any of the three words that actually appear in the claim: "hydrocarbon," "feed" and "stream."

The Federal Circuit has stressed that limitations not needed to interpret a particular term or phrase cannot be imported into a claim. See, *e.g.*, *Renishaw PLC v. Marposs Societa per Azioni*, 158 F.3d 1243, 1248-49 (Fed. Cir. 1998) ("If we need not rely on a limitation to interpret what the patentee meant by a particular term or phrase in a claim, that limitation is 'extraneous' and cannot constrain the claim"). Because Oxy's "prior to separation into the light hydrocarbon stream and the heavy hydrocarbon stream" requirement is not needed to interpret what is meant by "hydrocarbon,"

"feed" and "stream," it is unsound.

The Federal Circuit has recognized two narrow circumstances where the specification or prosecution history can dictate departure from a claim term's plain meaning: lexicography and disavowal. In both instances, the definition or disavowal must be "clear," and satisfy an "exacting" standard. See *GE Lighting Solutions, LLC v. Agilight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014). Here, the specification offers no "clear" definition consistent with Oxy's proposal, nor does it offer any "clear" disavowal of Pilot's. Oxy's proposed rewriting of "hydrocarbon feed stream" is accordingly wrong.

E. "Light Hydrocarbon Stream."

1. Pilot's Definition.

Claim 1 requires separation of two streams from a "light hydrocarbon stream." The plain meaning of "light hydrocarbon stream" is a stream that contains light hydrocarbons. Is there any need to clarify that meaning?

The only potential ambiguity in the plain meaning of the term rests in the stream's ingredients, only one of which is named. Can a "light hydrocarbon stream" contain anything **other than** light hydrocarbons? If yes, must light hydrocarbons be the predominant ingredient, or the predominant hydrocarbon ingredient, of the stream? Because the claim language affords no definitive answer, resort to the patent specification is appropriate.

The specification designates stream 224, shown in both Figures 1 and 2, as a "chilled light hydrocarbon stream." In Table 2, stream 224 is described as containing 36.14% light hydrocarbons (methane and ethane), 0.19% heavy hydrocarbons (propane and butane), and 63.17% carbon dioxide. See Pilot patent, col. 10, 1. 9-18. In a different example, stream 224 is described as

containing 36.13% light hydrocarbons, 0.20% heavy hydrocarbons, and 63.16% carbon dioxide. See Pilot patent, table 5, cols. 13 and 15.

These examples show that a "light hydrocarbon stream" need not be formed exclusively, or even predominantly, from light hydrocarbons. However, light hydrocarbons should predominate over heavy hydrocarbons in such a stream. It would make no sense to designate something a "light hydrocarbon stream" when its content of heavy hydrocarbons exceeds the light.

What mode of measurement will be used to determine whether a stream contains more light hydrocarbons than heavy? As the claim language provides no definitive answer, recourse to the patent specification is again appropriate. The specification instructs that percentage concentration, on a mole basis, is to be used as the measure of hydrocarbon content. See Pilot patent, col. 4, 1. 44-47, 58-59 ("the percentages herein are provided on a mole basis"). The same measure should be used evaluate hydrocarbon content for purposes of the claims.

As clarified by the specification, a "light hydrocarbon stream" is one where the light hydrocarbon concentration exceeds the heavy hydrocarbon concentration, measured on a mole percent basis.

2. Oxy's Definition.

Much as it has done with "hydrocarbon feed stream," Oxy seeks to define "light hydrocarbon stream" by the life history of a particular stream described in the specification. According to Oxy, a "light hydrocarbon stream" is one "**resulting from the separation of the hydrocarbon feed stream** and containing a substantially increased methane and ethane concentration compared to the hydrocarbon feed stream." As with "hydrocarbon feed stream," Oxy's definition unnecessarily imports a limitation from the specification into the claim.

We have used the specification to clarify the meaning of the term "light hydrocarbon," as used to designate a stream: that term means "predominantly light hydrocarbon," rather than "exclusively light hydrocarbon" or "any light hydrocarbon." Oxy, in contrast, is using the specification to provide the life history of a particular stream, which it then imports into its definition ("resulting from the separation ..."). But such life history is not needed to define any of the three words that actually appear in the claim: "light," "hydrocarbon," and "stream."

Claim limitations that are not needed to interpret a particular term or phrase cannot be imported into a claim. See *E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1433 (Fed. Cir. 1988) (improper to read limitation from the specification into the claim "wholly apart from any need to interpret what the patentee meant by particular words or phrases in the claim"). And nothing in the patent specification dictates otherwise: that specification contains neither a clear adoption of Oxy's proposal, nor a clear disavowal of Pilot's. See *GE Lighting*, 750 F.3d at 1309.

Another reason why Oxy's definition is wrong is found in claim 2, a claim that has not been asserted against Oxy. Claim 2 refers to claim 1, and adds to what claim 1 requires. See 35 U.S.C. § 112(d). And claim 2 expressly adds the very separation step that Oxy claims is **already** present in claim 1:

2. The process of claim 1 wherein the hydrocarbon feed stream is separated into the light hydrocarbon stream and a heavy hydrocarbon stream.

If separation is already in claim 1, then why did claim 2 try to add the exact same requirement? The answer, of course, is that claim 1 imposes no such requirement, and Oxy's construction is wrong. See *Curtiss-Wright Flow Control v. Velan, Inc.*, 438 F.3d 1374, 1380 (Fed. Cir. 2006) ("reading an additional limitation from a dependent claim into an independent claim would not only

make that additional limitation superfluous, it might render the dependent claim invalid"). Because Oxy's definition requires a separation step not present in claim 1, it is unsound.

A further flaw in Oxy's definition is found in its requirement that the light hydrocarbon stream "contain … a **substantially increased** methane and ethane concentration compared to the hydrocarbon feed stream." Yet the examples in the patent's specification describe no such "substantial increase."

The patent designates stream 200 as a "hydrocarbon feed stream" and stream 224 as a "chilled light hydrocarbon stream." In the example summarized in Table 2, the methane/ethane content in hydrocarbon feed stream 200 is 36.07% while the methane/ethane content in chilled light hydrocarbon stream 224 is 36.14%. See Pilot patent, col. 10, l. 11-13. The example summarized in Table 5 is similar. The methane/ethane content in stream 200 is 36.07%, while the methane/ethane content in stream 224 is 36.13%. See Pilot patent, cols. 13 and 15. In both examples, the increase in methane/ethane content (0.07% and 0.06%, respectively) is microscopic, rather than "substantial."

Requiring "a substantial ... increase ... [of] methane and ethane concentration compared to the hydrocarbon feed stream" would mean that the specification's examples are outside the scope of the claims. Such a construction would be unsound, because of the strong presumption that the claims cover what the specification describes. See *On-Line Technologies, Inc. v. Bodenseewerk Perkin-Elmer GmbH*, 386 F.3d 1133, 1138 (Fed. Cir. 2004) ("a claim interpretation that excludes a preferred embodiment from the scope of the claim is rarely, if ever, correct").

A "light hydrocarbon stream" is a stream where the light hydrocarbon concentration exceeds the heavy hydrocarbon concentration, measured on a mole percent basis. Oxy's definition of this term is wrong.

F. "Carbon Dioxide-Lean" and "Carbon Dioxide-Rich."

Claim 1 requires separation of a carbon dioxide-lean stream and a carbon dioxide-rich stream from the light hydrocarbon stream. As used in that claim, "carbon dioxide-rich" denotes a carbon dioxide concentration, measured on a mole percent basis, that is greater than the carbon dioxide concentration of the hydrocarbon feed stream. "Carbon dioxide-lean" denotes a carbon dioxide concentration, measured on a mole percent basis, that is less than the carbon dioxide concentration of the hydrocarbon feed stream.

The words in the claim require that the carbon dioxide content of a stream be "rich" or "lean," but state no standard for measuring those characteristics. These standards may be furnished by the specification. See *Datamize*, *LLC v. Plumtree Software*, *Inc.*, 417 F.3d 1342, 1351 (Fed. Cir. 2005). Here, the specification states: "the carbon dioxide-rich stream 244 contains a decreased concentration of hydrocarbons and an increased carbon dioxide concentration compared to the hydrocarbon feed stream 200." Pilot patent, col. 5, 1. 41-44.

Similarly, the specification states: "the carbon dioxide-lean stream 234 may contain an increased methane concentration and a decreased carbon dioxide concentration compared to the hydrocarbon feed stream 200." See Pilot patent, col. 4, 1. 62-64. Elsewhere, the patent adopts a mole percent basis for gauging concentration. See Pilot patent, col. 4, 1. 58-59. We have defined the two claim terms in accord with these standards.

Oxy makes two contentions about these terms. It first argues that both are impossible to define. We disagree, for the reasons just stated. In the alternative, Oxy contends that a "carbon dioxidelean" stream designates one "resulting from the separation of the light hydrocarbon stream, with a substantially lower carbon dioxide concentration than the hydrocarbon feed stream, and whose

temperature or composition does not change between the time it is separated from the light hydrocarbon stream and the time it is fed into the hydrocarbon sweetening process." We disagree.

Once again, Oxy's convoluted definition appears to be lifted from the life history of some stream described in the specification. But none of that life history is needed to define any of the three terms that actually appear in the claim: "carbon dioxide," "lean" and "stream." Importing such life history limitations from the specification is accordingly improper.

Claim 33 defines a process that produces streams designated as "carbon dioxide-lean" or "carbon dioxide-rich." These terms have the same definitions as claim 1.

G. "In" a Reflux Condenser.

Claim 1 requires separating one stream from another "in a reflux condenser." Claim 33 requires treating a stream "in a reflux condenser" to produce two other streams. To occur "in" a reflux condenser, a step must occur inside that reflux condenser, not outside of it. Steps that occur in one or more pipelines, or in some other equipment, do not occur "in a reflux condenser."

H. "Cooling" With a Carbon Dioxide-Lean Stream.

Claim 1 requires cooling the light hydrocarbon stream using at least a portion of the carbon dioxide-lean stream. Claim 33 requires cooling the hydrocarbon feed stream with at least a portion of the carbon dioxide-lean output stream. Both claims mean exactly what they say. "Cooling" means "cooling."

Oxy asks the Court to rewrite both claims by adding the modifier "primarily." Rather than simply cooling a stream, Oxy says that the carbon dioxide-lean stream must "primarily" cool that stream. But such rewriting of the claim language is forbidden. See, *e.g.*, *GE Lighting*, 750 F.3d at 1317 (court may not "import ... an extraneous adjectival modifier into the claim, which, in effect,

impermissibly rewrites the patent's claims").

I. First and Second "Column Streams."

Claim 33 requires treating the hydrocarbon feed stream in a distillation column to produce two streams. The first is a carbon dioxide-lean "first column stream" and the second is a carbon dioxide-rich "second column stream." The terms "carbon dioxide-lean" and "carbon dioxide-rich" have the meanings discussed in section F. A "first column stream" is a stream that originates in a column. A "second column stream" is another stream, different from the first, that originates in a column. These constructions follow from the plain meaning of the claim language.

Oxy contends that these terms are impossible to define. We disagree, for the reasons just stated.

J. Carbon Dioxide-Lean "Output Stream."

Claim 33 requires treating the first column stream in a reflux condenser to produce two streams. One of these is a reflux stream and the other a "carbon dioxide-lean output stream." The term "carbon dioxide-lean" has the meaning discussed in section F. An "output stream" is a stream that is outputted from where it is produced: here, the reflux condenser.

Oxy first contends that this term is impossible to define. We disagree, for the reasons just stated. In the alternative, Oxy argues that "carbon dioxide-lean output stream" means "the output of the reflux condenser." We disagree, because "the output" includes too much.

Claim 33 requires that two streams be produced in the reflux condenser, both of which are outputted to other equipment and functions: the reflux stream goes to the distillation column, while the carbon dioxide-lean output stream goes to cooling and sweetening steps. If everything outputted from the reflux condenser is a "carbon dioxide-lean output stream," as Oxy argues, there would be nothing left to serve as the "reflux stream" required for output by the claim. See *Power Mosfet*

Technologies, L.L.C. v. Siemens AG, 378 F.3d 1396, 1410 (Fed. Cir. 2004) (construction that renders claim term superfluous is disfavored).

Oxy's alternative construction of "carbon dioxide-lean output stream" renders the reflux stream of claim 33 superfluous, and is thus unsound. An "output stream" is a stream that is outputted from where it is produced.

K. "Treating."

In its preamble, claim 33 requires "treating" a hydrocarbon feed stream, and in its body, requires "treating" that stream in a distillation column. "Treating" means taking some action as to a thing.

Oxy asks Court to rewrite the claim by substituting "separating" for "treating." But other claims of Pilot's patent, such as claim 1, repeatedly use the term "separating." The use of a different term in claim 33 signifies a different meaning. See *CAE Screenplates Inc. v. Heinrich Fiedler GmbH*, 224 F.3d 1308, 1317 (Fed. Cir. 2000) ("In the absence of evidence to the contrary, we must presume that the use of these different terms in the claims connotes different meanings"). While "separating" may be a form of "treating," the terms are not synonymous. "Treating" means taking some action as to a thing.

L. Order of Steps.

As a matter of patent law, the steps of a method claim do not always have to be performed in a particular order. Here, however, the structure of the claims and the relationship of the steps dictates such an order.

In order to analyze step order, we will number the steps of claim 1:

A method of treating a hydrocarbon feed stream comprising carbon dioxide, the method

comprising:

- 1: separating a carbon dioxide-lean stream and a carbon dioxide-rich stream from a light hydrocarbon stream;
- 2: separating a reflux stream from the carbon dioxide-lean stream in a reflux condenser;
- **3**: recycling the reflux stream to a separator;
- 4: cooling the light hydrocarbon stream using at least a portion of the carbon dioxide-lean stream; and
- feeding at least a portion of the carbon dioxide-lean stream into a hydrocarbon sweetening process.

A carbon dioxide-lean stream is first produced in step 1. Step 2 processes that carbon dioxide-lean stream in a reflux condenser. Because no carbon dioxide-lean stream exists until the end of step 1, step 2 must follow step 1. A reflux stream is produced in step 2, and that reflux stream is further processed in step 3. Because no reflux stream exists until the end of step 2, step 3 must follow step 2. Thus, the first three steps of the claim must be performed in the order set out in the claim: 1, followed by 2, followed by 3.

Step 4 requires cooling the light hydrocarbon stream with at least a portion of the carbon dioxide-lean stream. Because no carbon dioxide-lean stream exists until the end of step 1, step 4 must come at least after step 1.

Step 5 requires feeding at least a portion of the carbon dioxide-lean stream into a hydrocarbon sweetening process. The other steps of the process must occur ahead of step 5, because the whole point of the patent is to increase the capacity of the sweetening process. See Pilot patent, col. 2, 1. 32-35 ("Disclosed herein is a carbon dioxide fractionalization process that may be positioned in front of an existing hydrocarbon sweetening process to increase the processing capacity of the hydrocarbon sweetening process"). It would make no sense to begin sweetening before the

fractionalization aimed at increasing sweetening capacity is complete.

Steps 1, 2 and 3 must occur in the order they appear in claim 1. Step 4 occurs after at least step 1, and step 5 follows the other steps.

As with claim 1, we will number the steps of claim 33 for the purpose of analyzing step order.

A process for treating a hydrocarbon feed stream containing carbon dioxide comprising:

- 1: treating the hydrocarbon feed stream in a distillation column to produce a carbon dioxide-lean first column stream and a carbon dioxide-rich second column stream;
- treating the first column stream in a reflux condenser to produce a reflux stream and a carbon dioxide-lean output stream;
- **3:** recycling the reflux stream into the distillation column;
- 4: cooling the hydrocarbon feed stream with at least a portion of the carbon dioxide-lean output stream; and
- 5: feeding at least a portion of the carbon dioxide-lean output stream into a hydrocarbon sweetening process.

In claim 33, a carbon dioxide-lean first column stream is first produced in step 1. Step 2 processes that first column stream in a reflux condenser. Because no first column stream exists until the end of step 1, step 2 must follow step 1. A reflux stream is produced in step 2, and that reflux stream is further processed in step 3. Because no reflux stream exists until the end of step 2, step 3 must follow step 2. Thus, the first three steps of the claim must be performed in the order set out in the claim: 1, followed by 2, followed by 3.

Step 4 requires cooling the hydrocarbon feed stream with at least a portion of the carbon dioxide-lean output stream. Because no output stream exists until the end of step 2, step 4 must come at least after step 2.

Step 5 requires feeding at least a portion of the carbon dioxide-lean output stream into a

hydrocarbon sweetening process. As discussed with claim 1, the other steps of the process must occur in front of step 5, because the whole point of the patent is to increase the capacity of the sweetening process.

Steps 1, 2 and 3 must occur in the order that they appear in claim 33. Step 4 occurs after at least step 2, and step 5 follows the other steps.

Oxy first argues that the order of steps is not a matter of claim construction. But the Federal Circuit has ruled otherwise. See *mFormation Technologies, Inc. v. Research in Motion Ltd.*, 764 F.3d 1392, 1398 (Fed. Cir. 2014) (addressing "The Order-of-Steps Requirement in the Claim Construction"). Alternatively, Oxy argues that the steps have no required order. We disagree, for the reasons just stated.

Respectfully submitted,

_/s/Gary S. Peterson

Gary S. Peterson, OK Bar Assoc. No. 7068, pro hac vice TOMLINSON McKINSTRY, P.C.
Two Leadership Square, Suite 450
211 N Robinson Avenue
Oklahoma City, Oklahoma 73102
(405) 606-3350 phone
(866) 633-6165 fax
garyp@tmoklaw.com

and

Robert D. Tomlinson, Texas State Bar No. 24084925 TOMLINSON McKINSTRY, P.C. 318 Ridgewood Austin, Texas 78746 (405) 606-3350 phone (866) 633-6165 fax bobt@tmoklaw.com

ATTORNEYS FOR PLAINTIFF, PILOT ENERGY SOLUTIONS, L.L.C.

CERTIFICATE OF SERVICE

I hereby certify that on this 15th day of February, 2017, I served a true and correct copy of the foregoing via CM/ECF to the following counsel of record:

Michael D. Marin, State Bar No. 00791174 Meg K. Rein, State Bar No. 24065562 BOULETTE GOLDEN & MARIN L.L.P. 2801 Via Fortuna, Suite 530 Austin, Texas 78746 (512) 732-8900—Telephone (512) 732-8905—Facsimile mmarin@boulettegolden.com meg.rein@gmail.com

Karl O. Bayer Karl Bayer Dispute Resolution 14900 Avery Ranch Blvd. Suite C200 Austin, Texas 78717-3961 karl@karlbayer.com alyson@karlbayer.com

and

Benoit Quarmby, pro hac vice Sara Margolis, pro hac vice MOLO LAMKEN LLP 430 Park Avenue New York, NY 10022 (212) 607-8160—Telephone (212) 607-8161—Facsimile bquarmby@mololamken.com smargolis@mololamken.com SPECIAL MASTER

and

Justin Weiner, pro hac vice
Michelle J. Parthum, pro hac vice
MOLO LAMKEN LLP
300 N. LaSalle Street
Chicago, IL 60654
(312) 450-6700—Telephone
(312) 450-6701—Facsimile
jweiner@mololamken.com
mparthum@mololamken.com

ATTORNEYS FOR DEFENDANT, OXY USA, INC.

_/s/Gary S. Peterson
Gary S. Peterson